

I claim:

1 1. A damper assembly, comprising:

2 (a) a frame including two spaced-apart support members;

3 (b) a vane pivotally supported between said two support members;

4 (c) a rocker bracket connected to said vane;

5 (d) a linkage rod for actuating said vane;

6 (g) a trunion pivot connected to said linkage rod, said trunion pivot including:

7 (i) a body portion with first and second end portions;

8 (ii) first and second bearing assemblies connected to said respective first

9 and second end portions; and

10 (iii) each of said first and second bearing assemblies having an inner race

11 and having an outer housing, and having rotational bearing elements enclosed between said

12 inner race and said outer housing; and

13 (f) said outer housing of each of said first and second bearing assemblies of said

14 trunion pivot contacting said rocker bracket to provide free pivotal movement of said

15 linkage rod with respect to said rocker bracket and with respect to said vane.

1 2. A damper assembly as in claim 1, wherein:

2 (a) said rocker bracket includes two opposed, spaced-apart wings each having
3 a bearing-receiving recess for supporting one of said bearing assemblies;

4 (b) said bearing-receiving recesses are spaced apart a distance substantially equal

5 to a distance between said bearing assemblies.

1 3. A damper assembly as in claim 2, wherein:

2 (a) each said inner race of said first and second bearing assemblies of said
3 trunion pivot extends outward from the associated outer housing; and

4 (b) each said first and second end portions of said body portion of said trunion
5 pivot includes a recess sized and shaped to receive said outwardly-extending end of said
6 inner races of said first and second bearing assemblies.

1 4. A damper assembly as in claim 3, wherein said trunion pivot includes fastening
2 means directed through said body portion and through said outwardly-extending ends of
3 said inner races of said first and second bearing assemblies for fixedly attaching said
4 bearing assemblies to said body portion.

1 5. A damper assembly as in claim 4, wherein said trunion pivot includes a linkage
2 rod-receiving hole between said recesses in said first and second end portions of said body
3 portion, said linkage rod-receiving hole being sized and shaped to slidably receive said
4 linkage rod.

1 6. A damper assembly as in claim 1, wherein:

2 (a) each said inner race of said first and second bearing assemblies of said

3 trunion pivot include a recess; and

4 (b) each said first and second end of said body portion of said trunion bearing
5 include an outwardly-extending end sized and shaped to be closely received into said recess
6 of an associated bearing assembly of said trunion bearing.

1 7. 4. A damper assembly as in claim 1, wherein:

2 (a) said rocker bracket further comprises two, spaced-apart wings, each having
3 a bearing-receiving recess; and

4 (b) said outer housings of each of said first and second bearing assemblies are
5 sized and shaped to be slidably received within one of said bearing-receiving recesses.

6 8. 5. A damper assembly as in claim 7, wherein said wings each include bearing-
7 supporting collars disposed around said bearing-receiving recesses, said bearing-supporting
8 collars being located to contact said outer housings of said first and second bearing
9 assemblies.

1 9. 10. A damper assembly as in claim 8, wherein said bearing-receiving recesses comprise
2 through holes in said wings and wherein said body portion of said trunion bearing is sized
3 and shaped to be slidably received within said rocker bracket through one of said through
4 holes.

1 10. ⁷ A damper assembly as in claim 1, wherein:

2 (a) said vane includes two control rods extending from opposite ends thereof for
3 pivotal support; and

4 (b) control rod bearing assemblies are connected to said two control rods, said
5 control rod bearing assemblies being supported by said support members and providing
6 for free pivotal support of said vane with respect to said frame.

1 11. ⁸ A damper assembly, comprising:

2 (a) a frame including two spaced-apart support members;

3 (b) a first and second vanes pivotally supported between said two support
4 members;

5 (c) first and second rocker brackets connected to said first vane, a third rocker
6 bracket connected to said second vane;

7 (d) first and second linkage rods for actuating said vanes;

8 (e) first, second and third trunion pivots, each including:

9 (i) a body portion with first and second end portions;

10 (ii) first and second bearing assemblies connected to said respective first
11 and second end portions; and

12 (iii) each of said first and second bearing assemblies having an inner race
13 and having an outer housing, and having rotational bearing elements enclosed between said
14 inner race and said outer housing;

15 (f) said first trunion pivot being connected to said first linkage rod, and said
16 second and third trunion pivots being connected to said second linkage rod;

17 (g) with respect to said first, second and third trunion bearings, said outer
18 housings of said bearing assemblies of each said first, second and third trunion pivots
19 respectively contacting said first, second and third rocker brackets to provide free pivotal
20 movement of said first and second linkage rods with respect to rocker brackets and with
21 respect to said vanes.

1 12. ~~9~~ A damper assembly as in claim 11, further comprising:

2 (a) a third vane pivotally supported between said two support members;

3 (b) a fourth rocker bracket connected to said third vane;

4 (c) a fourth trunion pivot, said fourth trunion bearing being connected to said
5 first linkage rod, and including:

6 (i) a body portion with first and second ends;

7 (ii) first and second bearing assemblies connected to said respective first
8 and second ends; and

9 (iii) each of said first and second bearing assemblies having an inner race
10 and having an outer housing, and having rotational bearing elements enclosed between said
11 inner race and said outer housing;

12 (d) said outer housings of said bearing assemblies of said fourth trunion pivot
13 each contacting said fourth rocker bracket to provide free pivotal movement of said first

